Serial No. 09/850,183

Reply to Final Office Action of October 3, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 1. Claims 1-7 (cancelled)
- 2. (previously presented) A computer-based method for incorporating a software component into a model of a network, comprising:

determining failure rates for warm recoverable errors and non-warm recoverable errors of said software component, wherein the warm recoverable errors comprise application failures that can be corrected by a restart without loss of state of the application and the non-warm recoverable errors comprise application failures that can be corrected by a restart with loss of state of the application;

determining recovery rates for the warm recoverable errors and the non-warm recoverable errors of said software component;

with a network modeling application running on a computing device, generating warm recoverable error state parameters from said warm recoverable error failure rates and said warm recoverable error recovery rates;

with the network modeling application, generating non-warm recoverable error state parameters from said non-warm recoverable error failure rates and said non-warm recoverable error recovery rates:

operating the network modeling application to construct the model of the network including the warm recoverable error state parameter and the non-warm recoverable error state parameters for the software component; and

storing the model of the network in memory.

- 9. (previously presented) The method of claim 8, further comprising with the network modeling application determining a fraction of recovery failures for said warm recoverable errors by dividing a number of failures to recover from said warm recoverable errors by a number of attempted recoveries from said warm recoverable errors, wherein the number of failures is greater than or equal to zero and the number of attempted recoveries is greater than or equal to one.
- 10. (previously presented) The method of claim 9, wherein said first generating step includes said fraction of recovery failures for said warm recoverable errors.

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- 11. (previously presented) The method of claim 8, further comprising with the network modeling application determining a fraction of recovery failures for said nonwarm recoverable errors by dividing a number of failures to recover from said nonwarm recoverable errors by a number of attempted recoveries from said non-warm recoverable errors, wherein the number of failures to recover from said non-warm recoverable errors is greater than or equal to zero and the number of attempted recoveries from said non-warm recoverable errors is greater than or equal to one.
- (previously presented) The method of claim 11, wherein said second generating step includes said fraction of recovery failures for said non-warm recoverable errors.
- (previously presented) The method of claim 8, further comprising with the 13. network modeling application receiving node recovery parameters.
- 14. (original) The method of claim 13, wherein said node recovery parameters include node reboot parameters.
- 15. (previously presented) The method of claim 8, further comprising with the network modeling application receiving network recovery parameters, including network reboot parameters.
- 16. (previously presented) A computer-based method for modeling a software error within a network model, comprising:

determining a recoverable state for said error;

determining a failure rate for said error;

determining a recovery rate for said error;

with a network modeling application running on a computing device, incorporating said failure rate and said recovery rate into said recoverable state;

with the network modeling application, determining a fraction of recovery failures for said error by dividing a number of failures to recover from said error by a number of attempted recoveries from said error, wherein the number of failures is greater than or equal to zero and the number of attempted recoveries is greater than or equal to one;

with the network modeling application, incorporating said fraction of recovery failures into said recoverable state:

operating the network modeling application to construct the network model WBO - 80168/0106 - 183761 v1

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including the recoverable state for said error for the software error, and storing the model of the network in memory.

Claim 17 (cancelled)

18. (previously presented) A computer program product comprising a computer useable medium having computer readable code embodied therein for incorporating a software component into a model of a network, the computer program product adapted when run on a computer to effect steps including:

determining failure rates for warm recoverable errors and non-warm recoverable errors of said software components, wherein the warm recoverable errors comprise application failures that can be corrected by a restart without loss of state of the application and the non-warm recoverable errors comprise application failures that can be corrected by a restart with loss of state of the application;

determining recovery rates for the warm recoverable errors and the non-warm recoverable errors of said software component;

generating warm recoverable error state parameters from said warm recoverable error failure rates and said warm recoverable error recovery rates; and generating non-warm recoverable error state parameters from said non-warm recoverable error failure rates and said non-warm recoverable error recovery rates.

19. (previously presented) A computer program product comprising a computer useable medium having computer readable code embodied therein for modeling a software error within a network model, the computer program product adapted when run on a computer to effect steps including:

determining a recoverable state for said error;

determining a failure rate for said error;

determining a recovery rate for said error; and

incorporating said failure rate and said recovery rate into said recoverable state;

determining a fraction of recovery failures for said error by dividing a number of failures to recover from said error by a number of attempted recoveries from said error, wherein the number of failures is greater than or equal to zero and the number of attempted recoveries is greater than or equal to one; and

incorporating said fraction of recovery failures into said recoverable state.